Answer Summaries to:

Adaptations and Interactions in the Estuary (Grades 4-6)



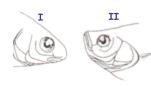
1. (D) Blue Crabs are known as some of the fastest swimming crabs around. This is because their fifth pair of legs has been modified into paddle-like appendages called swimmerets ."



2. (B) An Ibis is a shore bird that can often be seen in the shallow waters of the marsh and tidal mudflats. The long legs allow the Ibis to walk easily through the mud and shallow water. Their long curved beak allows them to reach worms and other invertebrates as they retreat to their holes in the mudflats.



3. (C) Ospreys and Eagles can be found in many of the estuaries in North America. They are classified as raptors because of their incredibly strong talons and fierce feeding habits. The talons of these birds allow them to dip into the water and grab unsuspecting fish.



4. (A) Fish find their food at different depths in the water column. Those fish with mouths on the underside (Fish I) feed along the bottom and over decaying plants. Those with mouths similar to Fish II, can be found feeding on insects and plants floating on the surface of the water.



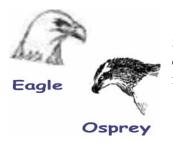
5. (B) Raccoons and other small mammals inhabit the shores of the estuaries. Young raccoons learn to feed on crabs without getting pinched by learning from their mistakes.



6. (C) During the migration season, ducks use the estuaries of the gulf coast to rest and feed before their journey across the Gulf of Mexico. Because duck feathers trap air so efficiently, ducks are better able to dry quickly, fly for long distances, and float with a lot of their body above the water.



7. (C) Brown Pelicans fly just above the water surface with their necks folded, heads resting on their backs, using slow, powerful wingbeats. When they feed, they dive beak-first into the water, returning to the surface with a mouthful of fish. Their massive bills, elastic throat pouch, and strong bodies are exceptional features for this type of feeding behavior.



8. (C) The bills of ospreys and eagles is strong and sharp. These characteristics make the eagle best adapted to ripping apart their food.



9. (A) The unique longer lower mandible allows the skimmer to fly near the surface of shallow water collecting insects and small fish. They can be recognized from afar by their black-tipped bill, red legs, and black topside.



10. (C) Nutria are an introduced species because they are not native to North America. They have earned their status as an iffvasive species because of the dramatic and sometimes irreversible damage done to marshlands by digging up and feeding on the roots of marsh grasses.